

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 14, lines 22-24, with the following paragraph, marked-up to show changes made.

Fig. 16 is an image of reactivity of hybridoma (~~K8233~~)(K8223) culture supernatant on human hepatocytes observed by immunofluorescence staining.

On page 30, directly after the paragraph on lines 14-20, please insert the following paragraph.

Mouse-Mouse hybridoma K8223 was deposited under the Budapest Treaty on the International Recognition of the Deposit of Microorganisms. The hybridoma was deposited (Accession No. FERM P-I8752) on March 6, 2002, and was subjected to international deposition on March 20, 2003 (Accession No. FERM BP-8334). The deposit was made at the International Patent Organism Depository, National Institute of Advanced Industrial Science and Technology, AIST Tsukuba Central 6, 1-1, Higashi 1-Chome Tsukuba-shi, Ibaraki-ken 305-8566 Japan.

Please replace the paragraph on page 42, line 29 to page 43, line 28, with the following paragraph, marked-up to show changes made.

Supernatant No.23 (Fig. 16) of cultured hybridoma, in which the hepatocytes membrane of the portal region was stained in tissue, was analyzed on reactivity at hepatocytes surface immediately after separation, by using FACS (fluorescence activated cell sorting). Hepatocytes of adult men, 46 years old and 49 years old, obtained by collagenase perfusion and low-speed centrifugation, were treated with culture supernatant of this sample at 4°C for 30 minutes, and an FITC labeled anti-mouse IgG antibody was then treated at 4°C for 30 minutes to make detection by FACS possible. As the result, a part of cells (1 - 2%) in a hepatocyte population reacted with the sample (Fig. 17). The reacted cell population, designated as R2 fraction, and the non-reacted cell population, designated as R3 fraction, were fractionated and cultured. Hepatocytes before fractionation were also cultured. As the result, colony formation was observed on culture after about 7 days in the hepatocytes before fractionation as described hereinbefore. On the other hand, colony-forming cells were not observed in the R3 fraction, but large numbers of colony were observed in the R2 fraction reacted with No.23 (Fig.18). Reactivity with the subcultured human hepatocytes was examined by FACS, and about 80% of the cells were found to be positive (Fig.19). Namely, it was considered that among the subcultured human hepatocytes, the differentiated cells during culturing process were not recognized and only the proliferative hepatocytes were recognized. From these results, No.23 was suggested to contain hybridoma which specifically recognized colony-forming cells. Clones obtained by cloning from the No.23 sample were analyzed by using FACS on reactivity at hepatocytes surface immediately after separation. As the result, 3 clones showing similar reactivity were obtained. Among these clones, 1 clone (Mouse-Mouse hybridoma ~~K-8233~~K8223) was deposited in The International Patent Organism Depositary, National Institute of Advanced Industrial Science and Technology (Deposition No. FERM P-I8752) on March 6,2002, and was subjected to international deposition on March 20, 2003 (Deposition No. FERM BP-8334).